

Amendments to the Claims

This listing of claims will replace the originally filed claims in the application.

Listing of Claims:

Claims 1 – 26 (cancelled).

Claim 27 (new): An apparatus which may be used as a fuel cell battery comprising:

- a) a series of elementary cells pressed against each other by a compressive means, wherein said cells comprise;
 - 1) a central structure, wherein said central structure comprises;
 - i) a membrane; and
 - ii) two electrodes located on either side of said membrane;
 - 2) an outer separating structure, located on either side of said central structure;
- b) a compressive means to press said cells together, wherein
 - 1) activating said compressive means compresses said cells such that said separating structures of adjacent cells are in contact with each other; and
 - 2) deactivating said compressive means decompresses said cells such that said adjacent cells may be detached from each other; and
- c) a fluid introduction and evacuation means, wherein said fluid means;
 - 1) extends along said cells; and
 - 2) can be connected individually to said cells.

Claim 28 (new): The apparatus of claim 27, wherein said fluid means comprises an extendable fluid distribution assembly.

Claim 29 (new): The apparatus of claim 28, wherein said fluid means further comprises at least two fluid distribution elements, wherein:

- a) said distribution elements are positioned next to each other in the direction of flow of each fluid; and
- b) said distribution elements are connected together by at least one intermediate connection, wherein said intermediate connection is capable of sliding in relation to the distribution elements it connects.

Claim 30 (new): The apparatus of claim 29, wherein each said fluid means comprises an electrically insulating material.

Claim 31 (new): The apparatus of claim 29, wherein each said fluid means comprises a moldable material.

Claim 32 (new): The apparatus of claim 27, wherein each said cell is connected to each said fluid means by a corresponding joining device.

Claim 33 (new): The apparatus of claim 32, wherein each said joining device is hollow and connects to a passage which connects to the corresponding said fluid means.

Claim 34 (new): The apparatus of claim 33, wherein each said joining device connects to a corresponding channel, wherein said channel is connected to said cell.

Claim 35 (new): The apparatus of claim 34, wherein said channel comprises at least one member selected from the group consisting of:

- a) a fluid inlet channel; and
- b) a fluid outlet channel.

Claim 36 (new): The apparatus of claim 34, wherein each said joining device is mounted on a support of said apparatus and wherein there is traverse clearance, with respect to said support, in the longitudinal direction of said group of cells.

Claim 37 (new): The apparatus of claim 36, wherein each said joining device comprises a holding device, and wherein each said holding device is located against the lower face of said support.

Claim 38 (new): The apparatus of claim 34, further comprising at least one leak proofing means, wherein:

- a) said leak proofing means ensures leak-proofness between each said joining device and each said corresponding channel; and
- b) said leak proofing means is located against a sealing zone, wherein said sealing zone is located adjacent to each said corresponding channel.

Claim 39 (new): The apparatus of claim 34, further comprising a means for applying uniform compression to said cells.

Claim 40 (new): The apparatus of claim 39, wherein said uniform compression means comprises:

- a) a first and a second end plate;
- b) an auxiliary plate located at a distance from said second end plate;
- c) at least one tensioning device located between said auxiliary plate and said second end plate; and
- d) a connecting means to connect said auxiliary plate and said first end plate.

Claim 41 (new): The apparatus of claim 40, wherein said tensioning device comprises at least one member selected from the group consisting of:

- a) a hydraulic device;
- b) a pneumatic device; and
- c) a jack device.

Claim 42 (new): The apparatus of claim 40, wherein said connecting means comprises at least two bars extending along said cells, and wherein each said bar passes through said first end plate, said second end plate, and said auxiliary plate.

Claim 43 (new): The apparatus of claim 39, further comprising a means for maintaining the compression applied to said cells.

Claim 44 (new): The apparatus of claim 43, wherein said compression maintaining means comprises at least one nut located on said bar, wherein said nut is capable of being positioned against at least one member selected from the group consisting of:

- a) said first end plate; and
- b) said second end plate.

Claim 45 (new): An apparatus, which may be used in a fuel cell battery, comprising a group of elementary cells, wherein each cell of said group comprises:

- a) at least one central structure, wherein said central structure comprises:
 - 1) a membrane; and
 - 2) two electrodes, wherein said electrodes are located on either side of said membrane; and
- b) two separating devices located at the ends of said cells, wherein each separating device is located so as to rest against the separating device of an adjacent cell.

Claim 46 (new): The apparatus of claim 45, wherein said cell further comprises a grasping means.

Claim 47 (new): The apparatus of claim 46, wherein said grasping means comprises a loop.

Claim 48 (new): The apparatus of claim 46, wherein said grasping means are attached to said separating devices.

Claim 49 (new): The apparatus of claim 45, further composing a means for initially positioning said cells within said apparatus.

Claim 50 (new): An apparatus which maybe used as a replacement kit for a group of elementary cells, wherein:

- a) each cell of said group comprises:
 - 1) at least one central structure, wherein said central structure comprises:
 - i) a membrane; and
 - ii) two electrodes, wherein said electrodes are located on either side of said membrane; and
 - 2) two separating devices located at the ends of said cells, wherein each separating device is located so as to rest against the separating device of an adjacent cell; and
- b) said apparatus comprises:
 - 1) a kit central structure, wherein said kit central structure comprises:
 - i) a kit membrane; and
 - ii) two kit electrodes, wherein said kit electrodes are located on either side of said kit membrane; and
 - 2) a closed packaging, wherein said packaging accommodates said kit central structure.

Claim 51 (new): The apparatus of claim 50, further comprising orifices in a peripheral seal of said kit central structure, wherein said orifices are situated so as to receive a means for initially positioning said kit in said group of cells.

Claim 52 (new): The apparatus of claim 50, wherein said packaging further comprises an inert gas.

Claim 53 (new): A method which maybe used for manufacturing a replacement kit for a group of elementary cells, wherein:

- a) each cell of said group comprises:
 - 1) at least one central structure, wherein said central structure comprises:
 - i) a membrane; and
 - ii) two electrodes, wherein said electrodes are located on either side of said membrane; and
 - 2) two separating devices located at the ends of said cells, wherein each separating device is located so as to rest against the separating device of an adjacent cell;
- b) said apparatus comprises:
 - 1) a kit central structure, wherein said kit central structure comprises:
 - i) a kit membrane; and
 - ii) two kit electrodes, wherein said kit electrodes are located on either side of said kit membrane;
 - 2) a closed packaging, wherein said packaging accommodates said kit central structure; and
- c) said method for manufacturing comprises:
 - 1) assembling said kit central structure by hot-pressing; and
 - 2) adding said packaging around said kit central structure.

Claim 54 (new): The method of claim 53, further comprising passing a conditioning current through said kit central structure prior to the addition of said packaging.